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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-27, 29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Coates et al (US 7,352,363).

As to **claim 1**, Watanabe discloses a method for entering data in an electronic terminal having a four-way input device with a center position and a sensor associated with each of the four ways, the method comprising the steps of:

allocating a data value (Fig. 2(output)) to each of the four possible (Fig. 2(C1, C4, C7 and C10) input device movement sequences that comprise a movement of the input device from the center position in one of the four ways followed by a return of the input device to the center position (see Fig. 9, movement sequence 1-3 which return the input device to the center position);

allocating a data value to each of the eight possible input device movement sequences that comprise a movement of the input device from the center position in one of the four ways followed by a movement of the input device in another of the four

ways without passing through the center position (see Fig. 9, sequence 4-6 is followed without passing through the center);

detecting the input device movement sequences with the sensors associated with the four ways (See Fig. 16(1702)); and

entering the data allocated to an input device movement sequence upon detection by the sensors of the input device movement sequence concerned (see Fig. 21(2203)).

However, Watanabe's does not teach wherein each of the data values have at least a plurality of characters associated therewith.

Coates discloses a single finger method for text entry via keypad wherein teaches each pad have a plurality of letters associated therewith (see Fig. 1).

It would have been obvious to one ordinary skill in the art at the time of invention was made to incorporate a plurality of letters associated with each key as in Coates into the method of entering data as in Watanabe, because this uses fewer keys and implements the short-cut input method. Therefore improves the versatility of the device (see Coates Abstract).

As to **claim 2**, Watanabe and Coates disclose a method according to claim 1, wherein the data values have a character associated therewith (see Watanabe Fig. 13, data 1402 has character S associated with it).

As to **claim 3**, Watanabe and Coates disclose a method according to claim 1, wherein a plurality, preferably eight, of the possible twelve different data values (see Watanabe Fig. 2(C1-C12) each have a plurality of preferably three or four letters of the

alphabet associated therewith (see Coates Fig. 1, each keypad have three of four letters associated with it).

As to **claim 4**, Watanabe and Coates disclose a method according to claim 3, wherein the letters of the alphabet are distributed over eight different data values as follows: abc, def, ghi, jkl, mno, pqrs, tuv, and wxyz (see Coates Fig. 1).

As to **claim 5**, Watanabe and Coates disclose a method according to claim 4, wherein the character "space" is assigned to one of the other data values (see Fig. 1, "space" is assigned to "\*\*").

As to **claim 6**, Watanabe and Coates disclose a method according to claim 1, further comprising the step of processing the data values having a plurality of characters is associated with a predictive editor program for generating an output containing words matching a string of received data values having a plurality letters associated therewith (see Coates Col. 3 lines 10-21).

As to **claim 7**, Watanabe and Coates disclose a method according to claim 3, wherein a digit is associated with the data values having a plurality of preferably three or four letters of the alphabet associated therewith when the duration of the activation of the last switch in the input device movement sequence allocated with the data value concerned exceeds a threshold (see Coates Fig. 5(73, 75)).

As to **claim 8**, Watanabe and Coates disclose a method according to claim 1, wherein the input device further comprises a center sensor associated with activation of the input device in the center position (see Watanabe Fig. 17(1801)).

As to **claim 9**, Watanabe and Coates disclose a method according to claim 8, wherein a data value entry having a plurality of characters associated therewith is disambiguated by the number of activations of the input device in the center position that follows the sequence of the input device movement to which the data value concerned is allocated (see Watanabe Fig. 3, sequence (1) is center position C0).

As to **claim 10**, Watanabe and Coates disclose a method according to claim 1, wherein the input device movement sequences and the characters or commands associated therewith are shown on the terminal as hard or soft labels proximate to the input device (see Watanabe Fig. 13 and 26, the input device uses for Japanese or English).

As to **claim 11**, Watanabe and Coates disclose a method according to claim 1, wherein the four ways are arranged orthogonally, and the digits associated with the input device movement sequences are arranged in a clockwise sequence around the input device (See Watanabe Fig. 26, digits associated with the input device from C5 to C7 are arranged in a clockwise around the input device).

As to **claim 12**, Watanabe and Coates disclose a method according to claim 1, wherein a tone is sounded for each sensor activation, preferably followed by a input confirmation when a data value is successfully entered (see Watanabe Fig. 4a(406)), or followed by a rejection tone when the data value entry failed (Watanabe Fig. 4a(405)).

As to **claim 13**, Watanabe and Coates disclose a method according to claim 8, the entry of a data value is confirmed by an activation of the center sensor (see Watanabe Fig. 17(1801)).

As to **claim 14**, Watanabe and Coates disclose a method according to claim 1, wherein the input device is a four-way joystick (see Fig. 1a(11)).

As to **claim 15**, Watanabe and Coates disclose a method according to claim 1, wherein the input device is a four-way pad (see Fig. 23a).

As to **claim 16**, Watanabe discloses a mobile communication terminal comprising:

- a display (fig. 1(30));

- a four-way input device (Fig. 1(10, 11)) with a middle position and a sensor associated with each of the four ways;

- a processor unit (Fig. 1(20)) monitoring the activation of the sensors and controlling the information shown on the display;

- a data value being assigned to each of the four activation sequences that comprise the activation of one of the four sensors followed by a return to the middle position in which none of the four sensors is active (see Fig. 9, sequence 4-6 is followed without passing through the center); and

- a data value or being assigned to each of the eight activation sequences that comprise the activation of one of the four sensors and whilst the sensor concerned is active followed by the activation of one of the other sensors (see Fig. 9, movement sequence 1-3 which return the input device to the center position);

- the processor unit upon detection of an activation sequence having a data value allocated therewith accepting the data value concerned as entered (Fig. 11a(1108, 1109);

However, Watanabe does not teach wherein the terminal has a plurality of operation modes including at least a mode for text entry in which a plurality of letters of the alphabet are assigned to each of the data values.

Coates discloses a single finger method for text entry via keypad wherein teaches a mode for text entry in which each pad have a plurality of letters associated therewith (see Fig. 1).

It would have been obvious to one ordinary skill in the art at the time of invention was made to incorporate a plurality of letters associated with each key as in Coates into the method of entering data as in Watanabe, because this uses fewer keys and implements the short-cut input method. Therefore improves the versatility of the device (see Coates Abstract).

As to **claim 17**, Watanabe and Coates disclose a mobile communication terminal according to claim 16, wherein the plurality of operation modes further includes a mode for numerical entry (see Watanabe fig. 26), in which digits are allocated to the data values, and/or a navigation mode in which navigational commands are allocated to the data values (Watanabe fig. 1b).

As to **claim 18**, Watanabe and Coates disclose a mobile communication terminal according to claim 16, wherein the terminal comprises a menu structure and the processor allocates navigational commands to the data values when the menu is entered (See Watanabe Fig. 4a(401-409)).

As to **claim 19**, Watanabe and Coates disclose a mobile communication terminal according to claim 17, wherein the simultaneous activation of a first predetermined pair



of outer sensors is associated with a clear or backspace function (Fig. 20(2106)) in the mode for numerical entry and the a mode for text entry.

As to **claim 20**, Watanabe and Coates disclose a mobile communication terminal according to claim 17, wherein the simultaneous activation of a second predetermined pair of outer sensors is associated with a change in the characters (see Watanabe Fig. 20(2107)) or commands (see Watanabe Fig. 20(2109)) allocated to the data values.

As to **claim 21**, Watanabe and Coates disclose a mobile communication terminal according to claim 16, further comprising a center sensor (Fig. 17(1801)) being associated with the middle position, the function of the center sensor being controlled and displayed by the processor unit in a dedicated area of the display (see Fig. 25 a-b).

Regarding claims **22- 26**, limitations within is similar to claims 16-20. Therefore, same rejection applies.

Regarding method **claims 27, 29**, limitation within is similar to claim 1 and claim 16. Therefore, same rejection applies.

As to **claim 31**, Watanabe and Coates disclose a method according to claim 2, wherein ten of the possible twelve different data values have digits associated therewith, where the digits are 0 to 9 (see Coates Fig. 2-3).

### ***Response to Arguments***

3 Applicant's arguments filed 4/14/2011 have been fully considered but they are not persuasive.

In response to applicant's argument regarding claims 1, 16, 22, 27 and 29 that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007).

In this case, Watanabe teaches a method for inputting Japanese letters using a directional device with a center position and sensors associated with all directions.

Coats discloses a method for inputting letters of the alphabet instead of Japanese letters. Using a input device for multiple language were known in the art to enabling versatility of a device, for instant, it is well know for using an common keyboard to inputting multiple language such as Japanese and English. Watanabe uses the device for Japanese could have been substituted with uses for alphabet, and the results would have been predictable. Therefore, the claimed subject matter would have been obvious to a person having ordinary skill in the art at the time the invention was made.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUK CHOW whose telephone number is (571)270-1544. The examiner can normally be reached on 8-6 M-TH E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quan-Zhen Wang can be reached on (571) 272-3114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. C./

Examiner, Art Unit 2629

/Quan-Zhen Wang/

Supervisory Patent Examiner, Art Unit 2629